



May 22, 2002

Bill Pennington
Bryan Alcorn

California Energy Commission
1516 Ninth Street
Sacramento, Ca 95814-5512

RE: DOCKET NUMBER—01-BSTC-1; Comments for April 23rd Staff Workshop -
CONSTRUCTION QUALITY-WALLS

Dear Sirs:

Thank you for taking the time to speak with me last week regarding the Commission's intentions to consider issues related to the quality of installation of various insulation materials. As you are aware NAIMA has several strong objections to the Commission's intent to use the data contained in the report entitled *Measure Analysis and Life Cycle Cost – Part I – Construction Quality - Walls* to evaluate the cost effectiveness of wall insulation. Although I expressed these concerns during our call, I also wanted to submit them in writing to be included in the public record.

NAIMA's objections include the following:

1. Simply put, relying on information from only ten homes as the basis for determining the cost-effectiveness of wall insulation is both technically inappropriate and legally unsupportable. Such dramatic changes in the energy code as contemplated by the CEC should be based on a significant sample size and rigorous statistics, not on the mere anecdotes presented to date. All building materials and systems can be installed improperly and all building codes can languish unenforced. To assume anything less than the design efficiency of a proper installation is simply the wrong approach.
2. The version of Title 24 that will result from this process will be based on this cost-benefit analysis. And "derating" one item (i.e., wall insulation) will result in a code that is improperly skewed in favor of other building components. Both the CEC and NAIMA should have the same goal: accurate rating studies and information so that all materials can compete on a level playing field.
3. After our conference call I had an opportunity to review the "CEC 2005 staff wall insul presentation." NAIMA strongly objects to the CEC presenting this information that depicts anecdotal problems with only one insulation material. The pictures in this presentation and the information in the report improperly imply that one type of insulation is trouble-free and another is wrought with

problems. NAIMA requests that the CEC not give “CEC 2005 staff wall insulation presentation” and remove the *Construction Quality - Walls* portion of the report from the web site. At the very least, CEC should indicate on the web site that the information is merely anecdotal at this stage and not determinative of all fiber glass installation practices. At present, this information is at best incomplete and at worst implies that the CEC improperly endorses one type of insulation over another.

The quality of work depicted in several of the slides should be dealt with as a construction defect or lack of building code enforcement and not in the underlying assumptions of the energy code. Issues of workmanship are best dealt with by performing proper inspections to assure both that materials are installed according to the manufacturer’s recommendations and that building codes are actually being enforced. NAIMA contends that, if work like that depicted in the presentation is occurring in one aspect of construction, it is safe to assume that all building components are experiencing similar quality of workmanship issues. To single out one industry for special treatment is unjustified.

We respectfully request that the CEC use the rated R-value of all the products in its cost-benefit analysis and work with NAIMA and other interested parties to ensure that all insulation systems are properly installed and all building codes properly enforced. NAIMA has developed training materials and distributes installation guides (see enclosures) that illustrate proper installation procedures. Last year, NAIMA sponsored the production of several videos that were placed on the CEC website and used to train code officials on proper installation techniques. NAIMA has also developed extensive training course materials that can be used to train installers on the correct installation of mineral fiber insulation products. We also are interested in supporting efforts to improve the quality of construction by educating and training insulation installers and building inspectors officials about good work practices.

Given the serious nature of this issue to our industry we respectfully request a meeting to discuss this in detail. Please let us know what dates and times would be available for a meeting in the near future. If you have any questions or comments, please do not hesitate to contact me at 703/684-0084. Please note I will be on travel and unavailable from May 22 until June 4. During this time please contact Matt Wald at NAIMA to discuss possible meeting dates.

Sincerely,

Charles C. Cottrell

Charles C. Cottrell
Director, Technical Services

Enclosures